

Serving the Underserved: Preparing Psychologists for Effective Practice in the Public Sector

Plenary 2: Speaker 2

Evidence Based Practices: Choosing Interventions that Work

Larry Beutler, PhD, ABPP

By the time we're done I hope you believe that my topic had something to do with choosing interventions that work. Latonya is a difficult act to follow, I will not attempt to do that but I do want to address this issue of selecting appropriate and effective treatments. Now let me give you the short answer to how to do that and then the more complex one. The short answer is that you enter any one of a dozen databases that identify empirically supported treatments or research based practices, one of which is the Society for Clinical Psychology's website through APA, and you will find a list of treatments very much like the list that Latonya has shared with you, but much longer. In fact among the lists of empirically supported treatments, the most popular one provides details on 154 different treatments. Those 154 different treatments are good for or touted to be good for patients that carry 52 different diagnoses. There are about 400 diagnoses in the DSM4, 397 actually plus an appendix with 30 more. Who knows what's going to be in the DSM-V. But if you want the short answer to the question of choosing an intervention that is "empirically supported", simply enter one of those databases and select a treatment that is designed for a patient that carries your targeted patient's diagnosis. You can then be assured, at that point, that that treatment has shown itself that it is better than doing nothing. All "research based practices" or "empirically supported treatments", and I want to distinguish between those two terms in a moment, are based upon that simple comparison to no treatment or no meaningful treatment. Thus, all they show you is which ones work better than nothing.

Now for the long answer—this one is for those who want a higher standard of comparison than "nothing". I want you to engage with me in a thought experiment, I want to raise three questions for you, and give me your first impressions by raising your hand if you consider this statement to be true. First, "Psychotherapy would be more effective if everyone practiced an empirically supported treatment." Well we got two people who believe this--okay. True or fals, number two, "Cognitive and cognitive behavioral therapies are more effective than relationship and insight oriented or psychodynamic therapies". How many believe that statement is true, based on however one might measure effectiveness when defining empirically supported treatment? Do you get symptom change, do you get people with fewer diagnoses following the treatment, those are the main ways that effectiveness has been assessed. Okay now hands now ... okay well we got a few more there about 12. And finally, "The therapeutic relationship between patient and therapist determines most of the meaningful outcomes that can be attributed to psychotherapy." Aha! Oh, now there's where you are. So many raise their hands for that statement. Then, if you believe that it is in the relationship rather than in the therapy, why are you here listening to how to select an empirically supported treatment? Why are you even here to hear about empirically supported treatments? You don't believe in them. And with good reason. So let's take a look at what the evidence says when we quit addressing this question of

effectiveness by simply determining if a treatment is better than doing nothing. Let's take a higher standard and ask what we have to do to select a treatment that is better than the usual alternative, or any alternative? What is better than Treatment as usual, another cognitive therapy or relationship therapy, some other therapy.

Let's take the first question. "Would psychotherapy be more effective if everyone practiced an empirically supported treatment?" Hundreds and hundreds of studies have now addressed that question. There are a number of well documented meta-analyses covering thousands of effects sizes that compare treatment as usual which is a varied thing. It's a varied thing but it ranges all the way from psychoactive medication to supportive therapy to psychodynamic therapy to something called recovery models, which are the treatments that people like to talk about within the community health movement these days---recovery models of treatment are also classified as research based models. Well of all of those meta-analyses and thousands of effects sizes there is virtually no evidence that any well developed, intensively studied, carefully crafted treatment is better than almost any haphazard treatment as usual. The average effect size if you understand effect sizes in meta-analyses is zero. If you don't understand effect sizes in meta-analyses zero means nothing. So while there are some isolated studies that show that sometimes a manualized empirically driven treatment is better than some kind of usual treatment, there are just as many that show just the opposite effect.

So let's look at question number two. "Are cognitive and cognitive behavioral therapies more effective than other types of treatment?" What about Relationship therapies, psychodynamic therapy, etc.? We got a couple of people---six people I think---that said that they thought that that this statement is true---cognitive therapies are better than others on the average. Well, if one looks at our academic and clinical programs, we certainly operate as this statement were true---how many of the treatments are we implementing in our clinics and training programs, in order to ensure that we are acting like we are empirically supported, are called "cognitive therapy"? Almost all of them. But the results are not that good my friends. When you begin looking at effect sizes and there are again a lot of good meta-analyses, and I'll refer you to Bruce Wampold's book, *The Great Psychotherapy Debate* and to a large number of papers that have come out of that line of research. There are thousands of studies comparing cognitive therapy or cognitive behavior therapy to some other treatment with any variety of populations. Bruce's conclusion is that in all these studies, the mean effect of comparing any treatment to cognitive therapy is---guess what---zero. Now do you know the meaning of zero?

Good! Good! In fact there are at least two meta-analyses that suggest that psychodynamic therapy--long term psychodynamic therapy--is better than cognitive therapy among people with severe problems and personality disorders--Axis II disorders. There's also a very good meta-analysis by Stewart and Robertson that shows that in treating depression, where we put a lot of faith in the value of cognitive therapy, something called "Interpersonal Psychotherapy" is the treatment of choice. Interpersonal psychotherapy consistently does better than cognitive therapy. But these differences are small, they account for less than 4% of the variance between them. There are only very small differences, even when they occur.

So let's take a look at the third question. "Does the relationship between the patient and therapist determine most of the meaningful outcome of psychotherapy." Well, in fact, this is the

most consistent finding of the three questions we have considered. Relationship, more than any other single variable, will get you the most consistent result. But, it is still quite variable. For example the correlation between the quality of the relationship and almost any outcome you can measure is, on the average about, .26. It varies from about .11, to about .29. But it averages about .26. You know what amount of change that accounts for? About 8% of the variance in outcome. It's not very much, I'm not very satisfied with that. We can only conclude that treatment relationship is a consistent but small contributor to treatment outcome. But let's hold onto it because it's the only variable among those embedded in the three questions I raised, the only one that allows us to say with some confidence that, yes it does work. We can say "yes" pretty clearly and pretty consistently.

Most professionals when they are asked these three questions, agree with the first two of them. In my first year introduction to psychotherapy class a year ago when I posed these questions to my students, 80% of the students said, "Yes, they are all true". "They're all true!" "I know because my professor said they're true." And professors also tend to believe that at least the first two are true statements. But, in fact, the evidence for the value of any particular psychotherapy with any particular problem is relatively weak. The most consistent finding is that there is no difference between different psychotherapies and treatment outcomes.

So what do we do? Do we give up? Do we go home? No! We've been talking today consistently about the need to broaden our models. Well I want you to think a little bit about how empirically supported treatments are identified. And, here's where I must make the distinction---Empirically supported treatments are not the same as Research-Based Practices. Research based practices is term borrowed from medicine that means only that there is evidence in somebody's mind and somebody's justification that this particular practice can be utilized effectively. In other words, it means that there is evidence that is persuasive enough most of the time that insurance companies have become persuaded of its effectiveness, too.

"Empirically supported treatments" is a term that has a more narrow definition. It simply says that two randomly controlled studies have demonstrated that this treatment is effective when compared to a no-treatment condition---I is better than nothing. That's all it means. And how do we get to that conclusion? We get there by controlling every possible variable that we can think of. We train the therapists so that we make them just as similar to one another as possible, we try to make them so they're clones of each other, to get rid of all therapist variation. Then we homogenize the patients as well. We used to just clump all patients into groups comprising of the same diagnosis, but now try to make them even more similar by equating scores on several key variables. So we try to get rid of all patient variance. And then we control things like relationship or therapist skill or measurement reactivity. We try to get rid of these "error" factors by holding their influence constant. So what we wind up with is a clear demonstration that the techniques that the therapist uses disembodied from the patient, disembodied from the therapist and disembodied from the environment, are better than nothing.

I want to suggest some alternative theorems for you that we can garner from contemporary treatment research. First of all it is an important theorem that "A belief does not equal a fact". The belief that the literature shows that cognitive therapy is the gold standard of treatments is different than the facts that it is no better than treatment as usual. We need to face

those things if we're going to change those things. So, it is important to know the difference between belief and fact and to remember to check the facts yourself.

A second theorem I propose is that, "Accepting something as true on the basis of strong belief alone, eventually produces disappointment." I want to give you an example that may be applied to the recent problems in Japan. But, the example comes from Hurricane Katrina. The people of New Orleans held out fervent hope that FEMA would come and intercede. FEMA didn't come. Strong belief, hope and faith alone do not make the events that we're looking for occur.

Third theorem. "Many treatments that are based on strong belief have proven to be ineffective or harmful when the facts are studied." Let me give you some examples of treatments that have been shown to be harmful, treatments that at one time were considered to be very effective. Drug abuse and resistance education, the DARE program is still practiced by over 40% of police departments in the country. The DARE program produces more negative effects than positive. CISD, Critical Incident Stress Debriefing is another example. Immediately following 9-11 there were two very strong meta analytic studies undertaken by a group in Europe whose job it is, is to evaluate all kinds of medical treatments. They concluded that CISD produced more damage than good, that the average treated patient in critical incident stress debriefing following a major trauma was no better off than the person that received no treatment at all and 20% recovered more slowly. Now those are the least harmful treatments. Among the more harmful is recovered memory therapy for dissociative identity disorder. The number of alters for example in DID's seems to increase with the length of therapy. Indeed, therapists have a tremendous influence on the increasing numbers of alter egos that become manifest. These increasing alters, induced by therapist behavior, then increases the length, complexity, and expense of treatment for DID.

Grief counseling for bereavement is another example of a harmful treatment. It performs worse than no treatment at all in 38% of the cases. Expressive experiential therapy, something I've written a lot about, even the experiential therapy that I developed performs poorly---20% of the time people get worse. Now, this is not to say that these treatments don't also produce some positive effects, but when 20% of the patients treated get worse, one must question the costs of benefit. Consider---people who receive no treatment get progressively worse from 5% to 10% of the time. In usual psychotherapy treatment as usual 10% of people continue to get worse. In an experiential treatment where a premium is placed on inducing strong emotional reactions, about twice as many patients get worse---what is the value of such interventions if they can't demonstrate some superiority to other treatments.

Relaxation training for panic disorder is another approach that must be taken with caution. It performs worse than no treatment among 30% to 55% of patients. Now what advantage of such treatments would compensate for these deterioration rates?

The effects of treatment are more positive when we begin to look at psychotherapy not as a set of medical interventions that are analogous to a pill whose ingredients we know. Psychotherapy is not a treatment from which we can get rid of all the contextual effects and then deliver it to the patient as we would a medication. When we quit thinking within that limited

medical framework and begin to think of psychotherapy as being a collection of principles that guide us in the development and use of interpersonal relationships and inform us of how people change, then we begin to see some interesting effects beginning to occur. I'll give you an example of that, systematic treatment selection. It's a thing that I've been working on for some period of time, years. Systematic treatment selection identifies effective psychotherapy by how closely what is being done complies with 18 different empirically derived principles of effective interactions between and among people. Compliance with these principles tell us about the conditions under which patient factors, context factors, treatment factors, and therapist factors are configured to yield positive benefits. This principle driven approach is the only one, among integrated models, that has been identified as empirically supported. And it is integrated because it doesn't focus on therapeutic schools, thus avoiding some of the problems that Latonya talked about when people have to learn new models. What you learn is a set of principles that are now applied differentially, not because the therapy is selected from different brands, but because the principles themselves direct us to change our approach based on characteristics of the patient. It is the characteristics of the patient that determine how we change the intervention, not the treatment theory or manual.

The application of research informed principles to treatment requires as a fundamental beginning that we broaden our definition of psychotherapy beyond that that used to identify empirically supported treatments. Specifically, it requires that we become inclusive rather than exclusive when we think of the many variables that influence change. So let's no longer think, for a moment, about psychotherapy or mental health treatment generally as being grouped into different categorical brands of intervention---200 or so different types. Let's think about it within this definition: psychotherapy is the therapeutic management control and adaptation of patient factors, therapist factors, relationship factors, and technique factors, that are associated with a positive change. If we can do that, we will find that now our task has switched from finding one manual that works to identifying factors that are associated with change.

Conceptualizing treatment at the level of the model is too broad. There are 50 different kinds of cognitive therapy at a minimum, and they're growing at an exponential rate. Now, if instead, we choose to seek an understanding of what works, we can start with some very good meta-analyses compiled by John Norcross for the 2nd edition of his book on *Relationships that Work*. I would like to extract from this latter text, research that our group contributed and add it to some selective contributions from other authors. These meta-analyses focus on the effects of therapist qualities that facilitate change along with two dimensions by which patient and treatment can be matched or fit together to optimize effects. The four resulting principles that I want to focus upon reflect only a small part of the 18 principles that we have identified. However, they illustrate that even if one just adheres to just these four principles, substantial changes may be made in rates of gain among patients. For a moment, I won't justify the principles and would ask that you take them on faith—just for a moment.

The first principle on which I would like you to focus says that the level of impairment of the patient should tell us something about how much we should get involved in enhancing social support and social activation. Specifically, it posits that the more impaired the patient, the more we should become involved in facilitating the development of a social support system for them. That is, as social impairment increases, the availability of social support goes down.

In order to implement this principle with a patient with moderate to severe functional impairment, we must step outside of the office. Treatment has to involve the outside world. That may suggest that for those with low impairment, an office practice might be okay. But for those of us who really have more serious distress and disturbance, we need something more than 50 minutes a week. We must get involved with people around us as a central core to making a change.

The second principle to which I want to draw your attention states that the skillful use of a relationship is correlated with outcome. So, in other words, the more you're able to establish a relationship with the patient and to use your own social skills as a therapist, and are able to do it skillfully and smoothly, the better outcomes you're going to have. Simply said--Relationships work!

The third principal is one of those that tells us how to select a set of interventions. It states that people's characteristic ways of avoiding discomfort can tell us where to focus our interventions. For a moment, let's think simply and roughly categorize people into two groups---those who see the problem as being within their environment and thus they act against the environment as a means of protection and those who see the problem as being themselves and act against themselves to establish control and safety. Empirically, among people who act against themselves, an insight oriented treatment is better than a behavioral or cognitively oriented treatment. For people of the first type, however---those who see the problem as external and seek to avoid it or change it, the treatment that is likely to be most effective is one which focuses on changing one's environment, one's symptoms, and one's reactivity, is likely to be most effective.

The fourth principle is also one that attends to how the therapist can adjust the treatment to fit the patient. It is based on the observation that patient resistance is an important part of therapy. The principle states that as the patient becomes more resistant, the more that therapist must give up control and re-empower the patient. The therapist must, in other words, become less demanding and more evocative. Therapist directiveness is optimally inversely related to the level of patient resistance.

For a moment, let us briefly look across studies in a meta-analytic framework to see what happens if we can implement these four principles. The social support by impairment interaction earns an effect size of .25, that accounts for about 8% of the variance, not a lot but it's significant. Relationship, as we saw earlier, accounts for about 5 to 8% of the variance in outcome. If you have a skillful therapist who can smoothly establish the relationship, you can improve the gains of treatment over those occurring from a randomly assigned therapist patient relationship by about 5%.

Going further, research on the third principle reveals that if you start modifying your approach to emphasize either a symptom focused or an insight focused set of goals, substantial improvement occurs. An effect size of .55 is associated with making your treatments fit the patient's coping style and accounts for 21% of patient change. A 20% change.

And finally fitting the level of therapist directiveness to fit patient resistance earns an effect size of .82, which says that fitting this dimension to the patient can increase the gain over random pairs of therapists and patients by 30%. When you put the effects of all four of these principles together, the result, conservatively, is an increase of about 64% in the persuasive power of your treatment. And you haven't had to learn a new model or study a new treatment manual. All you've done is learn a decision making process that draws you to emphasize certain things and de-emphasize others.

Briefly, I will introduce you to the STS Assessment System which is designed to help you select what things to emphasize. We have two websites. The first one you see here is www.innerlife.com. I invite you on to take a look at it. It's free, no cost to you or your patient. It provides a report based on a computer assisted evaluation of the patient. The patient responds to questions, the computer summarizes the results in the form of an evaluation and provides a report to the patient. Its designed as a self help system. The report is designed in a way that it indicates the major problem areas, identifies severity, indicates the description of an optimal therapy or intervention, and provides some self-help skills and websites.

The second website just went online day before yesterday, its <www.webpsychcorp.com>. We're still working on it. I will produce a report that parallels the patient's report but it's aimed at the clinician. Clinics can obtain use of the service for a nominal charge. The clinician report is more detailed than the one given to patients. It identifies the major problem areas that are present and the optimal principles that will advance treatment goals. It also gives some instruction on the implementation of these principles and notes the types of outcome that are likely. It also provides a means for tracking patient change and comparing it to a rate of expected change. The people involved in this project in addition to myself, include a colleague and partner Dr. Oliver Williams and Dr. John Norcross who many of you know.

In sum, the software system is designed to help the clinician or patient address particular needs as defined by responses to several basic questions: what are the problems, what are the symptoms associated with those problems, and how does that compare to other people who have been entering treatment. What is the estimated risk, what's the best and worst scenarios, what types of intervention should the patient look for, what type of therapist should the patient look for, how will you know when you find it, what type of self help options are available and what if you don't have insurance.

As you enter the website, you'll be asked to give a user name and a password. If you don't have one provided to you, you can click on a button and it will deliver one to your email account and again, no charge. You will enter the site and as you do, it'll instruct you as to what is required to begin. You will be provided with a menu of options and generally will select the option of Selective Treatment. That will call up the questions that will allow the evaluation to take place. There are also lists of research publications and other information, if you should so choose. As you proceed through the list of questions, the length will vary as a function of a branching logic that will minimize the use of irrelevant questions. Usually a patient takes from 10 to 25 minutes to complete the questions. When he or she is finished, either the clinician or patient can print out the relevant report. The report serves as an intake report, but it can be

modified or appended to other electronic documents. You can also transfer it to a Word document and can edit it and change it to fit with your own needs.

The report varies in length from 12 to 14 pages. There are 25 different problem areas within the STS system that are evaluated and you can look at the graphs on each of those that are indicated as potential areas of concern for the patient. You can also do follow up evaluations to mark change and progress over time on each relevant problem area. Based on the normative data, you can also view a graph that charts the likely course of treatment for your patient. On the progress chart, the green lines show the expected rate of progress based on similar patients. The red line tracks patients over time and identifies what the actual change is compared to this theoretical change over time. That can be done for any of a variety of the problems that are indicated or for a global well being estimate.

If I were to give you something that you could take home as a tool and a technique it is this. The best thing you can possibly do to enhance the rate of change is to measure two things formally and systematically on your patients. One is outcome on a regular, regular basis. Whatever you consider to be the outcome, find an outcome measure that you can chalk on a very regular basis, and secondly measure the strength of the relationship. If you go beyond that take a look at some of the basic principles and say am I following those principles. And there are tools available to help you do that that I'd be happy to supply to you if you want to write to me. I will end it at that point with one final thing. See all do not win prizes in spite of what you may have heard. This is my good friend Robbie and me, we won a prize too.

GARCIA-SHELTON

Love that picture. Thank you very much, thank you very much. I think these two plenary speeches have given us a lot to think about in terms of what is the scientific basis that we can use to inform what we do, and the challenges that we face in sorting that out in this world. So we now move to our second discussion section which will go for an hour so it'll go till about 4:35 and I'll let you know when that happens so you do not have to monitor the clock. After that we have a break and then our award banquet is at 5:00 and it's a plated meal, not a buffet. So 5:00 you want to be in the room that's right next door to us, the room that we haven't been in yet. Thank you.